Supreme Court, U.S.
FILED
APR 2 1999
CLERK

No. 98-830

In the Supreme Court of the United States

OCTOBER TERM, 1998

AMOCO PRODUCTION COMPANY, ET AL., PETITIONER

v.

SOUTHERN UTE INDIAN TRIBE, ET AL.

ON WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE TENTH CIRCUIT

BRIEF FOR THE FEDERAL RESPONDENTS

SETH P. WAXMAN
Solicitor General
Counsel of Record

LOIS J. SCHIFFER
Assistant Attorney General

EDWIN S. KNEEDLER
Deputy Solicitor General

JEFFREY P. MINEAR
Assistant to the Solicitor General

JEFFREY C. DOBBINS
ELIZABETH ANN PETERSON
Attorneys

Department of Justice
Washington, D.C. 20530-0001
(202) 514-2217

JOHN D. LESHY
Solicitor
Department of the Interior
Washington, D.C. 20240

58 pp

QUESTION PRESENTED

Whether Congress's reservation of "coal" in the Coal Lands Act of 1909, ch. 270, 35 Stat. 844, and the Coal Lands Act of 1910, ch. 318, 36 Stat. 583, includes coal bed methane.

TABLE OF CONTENTS

	Page
Opinions below	1
Jurisdiction	1
Statement	2
A. The physical resource	2
B. The statutory basis for the competing ownership claims	7
C. The current controversy	10
Summary of argument	14
Argument:	
The court of appeals correctly ruled that the Coal Lands Acts of 1909 and 1910 do not grant the patent holder a right to extract coal bed methane from the reserved coal	17
Introduction	17
A. The 1909 and 1910 Acts do not unambiguously convey away public ownership of CBM	19
1. The term "coal" has never been understood to refer only to what petitioners call "solid coal"	20
2. The "historical context" of the 1909 and 1910 Acts does not support petitioners' construction	28
B. The court of appeals properly invoked the statutory canon of construction that ambiguity in public land grants must be resolved in favor of the sovereign	41
C. The Solicitor of the Interior acted properly in withdrawing his 1981 opinion	45
Conclusion	49

TABLE OF AUTHORITIES

Cases: Page

Andrus v. *Charlestone Stone Prods. Co.*, 436 U.S. 604 (1978) 41
Berger v. *United States*, 295 U.S. 78 (1935) 47
Burke v. *Southern Pac. R.R.*, 234 U.S. 669 (1914) 19, 21
Caldwell v. *United States*, 250 U.S. 14 (1919) 41
Carbon County v. *Union Reserve Coal Co.*, 898 P.2d 680 (Mont. 1995) 36
Champlin Refining Co. v. *Corporation Comm'n*, 286 U.S. 210 (1932) 34
Chartiers Block Coal Co. v. *Mellon*, 25 A. 597 (Pa. 1893) 35
Cherokee & Pittsburgh Coal & Mining Co. v. *Board of County Comm'rs*, 80 P. 601 (Kan. 1905) 34
Estate of Cowart v. *Nicklos Drilling Co.*, 505 U.S. 469 (1992) 45
Deal v. *United States*, 508 U.S. 129 (1993) 22
Deserant v. *Cerillos Coal R.R.*, 178 U.S. 409 (1900) 30
Kansas Natural Gas Co. v. *Board of County Comm'rs*, 89 P. 750 (Kan. 1907) 16, 21, 35
Kidwell v. *General Petroleum Corp.*, 212 Cal. 720 (1931) 35-36
Kiowa Tribe v. *Manufacturing Techs., Inc.*, 118 S. Ct. 1700 (1998) 44
Leo Sheep Co. v. *United States*, 440 U.S. 668 (1979) 42
Major, In re, 134 Ill. 19 (1890) 34
NCNB Tex. Nat'l Bank v. *West*, 631 So.2d 212 (Ala. 1993) 36
National R.R. Passenger Corp. v. *Boston & Maine Corp.*, 503 U.S. 407 (1992) 22
Northern Pac. R.R. v. *Soderberg*, 188 U.S. 526 (1903) 41

Cases—Continued: Page

Ohio Oil Co. v. *Indiana*, 177 U.S. 190 (1900) 34
Ownership of and Right to Extract Coalbed Gas in Federal Coal Deposits, 88 Interior Dec. 538 (1981) 11
Pennsylvania Coal Co. v. *Mahon*, 260 U.S. 393 (1922) 34
Reno v. *Koray*, 515 U.S. 50 (1995) 22
Robinson v. *Shell Oil Co.*, 519 U.S. 337 (1997) 15, 19, 43
Sanderson v. *City of Scranton*, 105 Pa. 469 (1884) 34
United States v. *Arredondo*, 31 U.S. (6 Pet.) 691 (1832) 41
United States v. *Denver & Rio Grande Ry.*, 150 U.S. 1 (1893) 42
United States v. *Locke*, 471 U.S. 84 (1985) 19
United States v. *Midwest Oil Co.*, 236 U.S. 459 (1915) 9
United States v. *Morton*, 467 U.S. 822 (1984) 45
United States v. *Southern Ute Tribe*, 402 U.S. 159 (1971) 10
United States Steel Corp. v. *Hoge*, 468 A.2d 1380 (Pa. 1983) 36
United States v. *Union Pac. R.R.*, 353 U.S. 112 (1957) 41
Vines v. *McKenzie Methane Corp.*, 619 So.2d 1305 (Ala. 1993) 36
Watt v. *Western Nuclear, Inc.*, 462 U.S. 36 (1983) ..... *passim*

Constitution and statutes:

U.S. Const. Art. IV, § 3, Cl. 2 41
Act of May 20, 1862, ch. 75, 12 Stat. 392 7
Act of Mar. 3, 1877, ch. 107, 19 Stat. 377 (43 U.S.C. 321-323) 7
Act of June 15, 1880, ch. 223, 21 Stat. 200 10
§ 3, 21 Stat. 203 10
Act of June 25, 1910, ch. 421, 36 Stat. 847 9

Statutes—Continued: Page

Act of Aug. 24, 1912, ch. 367, 37 Stat. 496 33
§ 1, 37 Stat. 496 9
Act of Mar. 4, 1933, ch. 278, 47 Stat. 1570 (30 U.S.C. 124) 37
Agricultural Entry Act of 1914, ch. 142, 38 Stat. 509 (30 U.S.C. 121-123) 9, 11, 33
§ 1, 38 Stat. 509 ..... 9, 11
Coal Lands Act of 1864, ch. 205, 13 Stat. 343 8
Coal Lands Act of 1873, ch. 279, 17 Stat. 607 (30 U.S.C. 71 *et seq.*) 8
Coal Lands Act of 1909, ch. 270, 35 Stat. 844 (30 U.S.C. 81) ..... *passim*
Coal Lands Act of 1910, ch. 318, 36 Stat. 583 ..... *passim*
§ 1, 36 Stat. 583 8
§ 3, 36 Stat. 584 (30 U.S.C. 83-85) 2, 9
Energy Policy Act of 1992, Pub. L. No. 102-486, § 1339, 106 Stat. 2986 (42 U.S.C. 13368) 43
Enzi Act, Pub. L. No. 105-367, 112 Stat. 3313 44
Indian Mineral Leasing Act, 25 U.S.C. 396a 39
Indian Reorganization Act of 1934, ch. 576, 48 Stat. 984 (25 U.S.C. 461-479) 10
Mineral Leasing Act of 1920, 30 U.S.C. 181 *et seq.* 11, 37-38, 39
Pickett Act, 43 U.S.C. 141 *et seq.* 9
Stock-Raising Homestead Act of 1916, ch. 9, 39 Stat. 862 (43 U.S.C. 291 *et seq.*) 9, 33
§ 9, 39 Stat. 864 10
Uraniferous Lignite Act, 30 U.S.C. 541-541e 37
26 U.S.C. 29 40
28 U.S.C. 2401(a) 12
30 U.S.C. 552 27
42 U.S.C. 8302(a)(5) 27

Miscellaneous:

VI *The American Cyclopaedia: A Popular Dictionary of General Knowledge* (Ripley & Dana eds., 1873) 22
American Geological Institute, *Dictionary of Geological Terms* (1980) 25

Miscellaneous—Continued: Page

Bend, *The Origin, Formation, and Petrographic Composition of Coal*, 71 J. of Fuel 851 (1991) 3, 4
Bowles, *Coalbed Gas: Present Statuts of Ownership Issue and Other Legal Consideration*, 1 Eastern Min. L. Inst. 7-1 (1980) 11
Bureau of Mines, Dep't of the Interior:
The Escape of Gas from Coal (1911) 20, 24
The Status of the Gas Producer and the Internal-Combustion Engine in the Utilization of Fuels 1912) 30
II *Century Dictionary & Cyclopedia* (1906-1909) 21
Tomkeieff, *Coals and Bitumens* (1954) 27-28
41 Cong. Rec. 2615 (1907) 8
45 Cong. Rec. (1910):
p. 4644 31-32
p. 6042 9
p. 6044 32
p. 7453 9
Chamberlin, *The Gases in Rocks* (1908) 24
Craig & Myers, *Ownership of Methane Gas in Coalbeds*, 24 Rocky Mtn. Min. L. Inst. 767 (1978) 11
VI *Encyclopedia Britannica* (11th ed. 1910) 20, 22
Farnell, *Methane Gas Ownership: A Proposed Solution for Alabama*, 33 Ala. L. Rev. 521 (1982) 11
Gates, *History of Public Land Law Development* (1978) 7
H.R. Doc. No. 823, 59th Cong., 2d Sess. (1907) 30
H.R. Doc. No. 1538, 60th Cong., 2d Sess. (1909) 24
H.R. Rep. No. 1938, 72d Cong., 2d Sess. (1933) 37
Hunt, *Petroleum Geochemistry and Geology* (2d ed. 1996) 6, 41
Larson & Gorbaty, *Coal Structure and Reactivity, in* 3 *Encyclopedia of Physical Science and Technology* (2d ed. 1992) 3, 4-5, 23, 26
Levine, *Coal Composition, as Related to the Mode of Occurrence of "Coalbed Methane"* (1992) 4, 5

Miscellaneous—Continued: Page

Lewin, *Coalbed Methane: Recent Court Decisions Leave Ownership "Up in the Air" But New Federal and State Legislation Should Facilitate Production*, 96 W. Va. L. Rev. 631 (1994) 40
Lindley, *American Law Relating to Mines and Mineral Lands* (3d ed. 1914) 33
McGinley, *Legal Problems Relating to Ownership of Gas Found in Coal Deposits*, 80 W. Va. L. Rev. 369 (1978) 11
Morrison & De Soto, *Mining Rights on the Public Domain* (15th ed. 1917) 33
Myers, *Coal Handbook* (1981) 3
New Standard Dictionary of the English Language (1913) 22
Olson, *Coalbed Methane: Legal Considerations Affecting Its Development As An Energy Resource*, 13 Tulsa L.J. 377 (1978) 11
Perry, *The Gasifiscation of Coal*, 230 Sci. Am., No. 3 (Mar. 1974) 30
1 Ricketts, *American Mining Law* (1948) 33, 34-35
Roosevelt, *An Autobiography* (1913) (1924 rep.) 31
Scott et al., *Thermogenic and Secondary Biogenic Gases, San Juan Basin, Colorado and New Mexico-Implications for Coalbed Gas Producibility*, 78 AAPG Bull. 1186 (1994) 36-37
Swenson, *Legal Aspects of Mineral Resources Exploitation, in* Gates, *History of Public Land Law Development* 699 (1978) 7, 8, 31
Tissot & Welte, *Petroleum Formation and Occurrence* (2d ed. 1984) 26, 41
United States Geological Survey:
Dep't of the Interior, *Contributions to Economic Geology 1906* (Pt. 2) (1907) 20
Dep't of the Interior, *Notes on Explosive Mine Gases and Dusts, with Special Reference to Explosions in the Mononagah, Darr, and Naomi Coal Mines* (1909) 24, 25
United States Geological Survey, *The Valuation of Public Coal Lands* (1910) 28

Miscellaneous—Continued: Page

Van Krevelen, *Coal* (1993) 3, 4, 5, 21, 23, 26
1 *Van Nostrand's Scientific Encyclopedia* (7th ed. 1988) 5
Ward, *Coal Geology, in* 3 *Encyclopedia of Physical Science and Technology* (2d ed. 1992) 3
1 Williams & Meyers, *Oil and Gas Law* (1996) 34, 35, 39, 48

In the Supreme Court of the United States

OCTOBER TERM, 1998

No. 98-830

AMOCO PRODUCTION COMPANY, ET AL., PETITIONER

v.

SOUTHERN UTE INDIAN TRIBE, ET AL.

ON WRIT OF CERTIORARI
TO THE UNITED STATES COURT OF APPEALS
FOR THE TENTH CIRCUIT

BRIEF FOR THE FEDERAL RESPONDENTS

OPINIONS BELOW

The opinion of the en banc court of appeals (Pet. App. 1a-51a) is reported at 151 F.3d 1251. The panel decision of the court of appeals (Pet. App. 52a-94a) is reported at 119 F.3d 816. The opinion of the district court (Pet. App. 95a-132a) is reported at 874 F. Supp. 1142.

JURISDICTION

The court of appeals, sitting en banc, entered its decision on July 20, 1998. On October 15, 1998, the Chief Justice extended the time for filing a petition for a writ of certiorari to November 18, 1998, and the petition was filed on that date. The jurisdiction of this Court is invoked under 28 U.S.C. 1254(1).

STATEMENT

At the beginning of the twentieth century, President Theodore Roosevelt and Congress took action to maintain the Nation's coal resources in public ownership to meet the Nation's vital energy needs. This case presents the question whether, when Congress reserved "all coal" in the Coal Lands Act of 1909, ch. 270, 35 Stat. 844, and "all the coal" in the Coal Lands Act of 1910, ch. 318, § 3, 36 Stat. 584, Congress retained all of the hydrocarbon compounds present in coal, including a component commonly known as coal bed methane (CBM). The United States Court of Appeals for the Tenth Circuit, sitting en banc, determined that Congress retained the CBM as part of the reserved coal and that the Southern Ute Indian Tribe, which now owns some of that reserved coal, therefore also owns the CBM component. Petitioners Amoco Production Company et al., challenge that ruling. Petitioners contend that Congress reserved only those components that they describe as "solid coal." To place this controversy in context, we first describe the nature of the physical resource at issue and the statutory bases for the competing ownership claims. We then turn to the origins and posture of the current controversy.

A. The Physical Resource

Petitioners and the Tribe make competing claims to the ownership of CBM that rest, in significant part, on their different characterizations of that energy resource. The Tribe, which indisputably owns the coal underlying its Reservation, contends that CBM is a constituent of coal. Petitioners, who claim a right to drill for natural gas within the Reservation, contend that CBM is simply natural gas that happens to be found in coal deposits. The United States had originally agreed with petitioners' characterization, but, as a result of further analysis precipitated by the court of appeals' decisions, the United States has concluded that

petitioners' position is wrong. To shed light on the competing characterizations, we begin by providing a brief introduction to the undisputed scientific facts respecting coal and CBM.

1. Coal is essentially fossilized plant material that has undergone a physical and chemical transformation, over millions of years, through the process of accumulation, biological decomposition, and metamorphosis under conditions of high pressure and temperature. See, *e.g.*, Van Krevelen, *Coal* 2-3 (1993) (Van Krevelen); Ward, *Coal Geology*, *in* 3 *Encyclopedia of Physical Science & Technology* 371-372 (2d ed. 1992). Coal is a heterogeneous substance that invariably contains carbonaceous material, moisture, and small amounts of minerals. *Id.* at 372. Because the conditions for coal formation vary, the composition and characteristics of individual coal deposits are not uniform. *Ibid.* For practical purposes, coal users customarily classify coal, based on the ascending degree to which "coalification" has taken place, as lignitic, sub-bituminous, bituminous, and anthracitic. See *id.* at 377, Table I (Coal Classification by the American Society for Testing and Materials (ASTM)). See generally Myers, *Coal Handbook* (1981) (J.A. 543-552); Bend, *The Origin, Formation, and Petrographic Composition of Coal*, 71 J. of Fuel 851-862 (1991) (Bend) (C.A. App. 664-675); Aff. of Dr. Harry Marsh, JA 378-379; Aff. of Jeffrey R. Levine, JA 347-348.

Bituminous and anthracitic coals generally have the appearance of a black rock. Their actual structure, however, is quite complex. See Larson & Gorbaty, *Coal Structure and Reactivity*, *in* 3 *Encyclopedia of Physical Science and Technology* 437, 441 (2d ed. 1992) (Larson & Gorbaty). At the macroscopic level, coal typically exhibits stratified layers that are themselves composed of microscopic organic composites, called macerals, interspersed with mineral matter. *Id.* at 439-440, 443. The composition of the macerals depends

in part on the composition of the fossilized organic material (*e.g.*, lignins, waxes, or carbonized wood). *Id.* at 439-440. See generally Bend, C.A. App. 675-680; Marsh Aff., JA 374-376; Aff. of Stephen L. Bend, JA 302 & Table A.

2. The dispute in this case arises from the unusual physical characteristics of coal. Coal is extremely porous, containing as much as 20% void volume, and yet is relatively impermeable to passage of gases and liquids. See Larson & Gorbaty 442-443. The carbonaceous materials within the macerals of bituminous and anthracitic coals typically are "penetrated by an extensive network of very tiny pores and, because of this, have enormous surface areas." *Id.* at 442-443. At the same time, the small size of the pores restricts the passage of molecules through the coalbed. "The smaller pores are about the same size as small molecules, so coals are molecular sieves, capable of trapping small molecules in their pores while denying access to larger molecules." *Id.* at 443. See also, *e.g.*, Van Krevelen 207-211.[1]

At this molecular level, coal is not a typical crystalline solid. "Coals are believed to be three-dimensionally cross-linked macromolecular networks containing dissolved organic material that can be removed by extraction." Larson

[1] Coal's pore structure differs in important respects from that found in conventional "reservoir" rocks that contain hydrocarbon gas and liquids. In the case of coal, the pore structure originated from the same organic material that comprises the contained hydrocarbons; the pore structure is itself composed of hydrocarbons; and the pores are orders of magnitude smaller than those found in conventional reservoir rocks, which hold hydrocarbons that migrated from elsewhere. See Levine, *Coal Composition, as Related to the Mode of Occurrence of "Coalbed Methane"* (1992) (JA 608-611). "To provide a concept of scale: A single methane molecule residing in a 1 millimeter-diameter pore [typical of conventional reservoir rock] has the same 'aspect ratio' as a pin *point* (not a pin head) in a football field; whereas the microporosity in coal is barely larger than the sorbate molecules that reside within it." JA 610.

& Gorbaty 444. "The extractable portion of the coal is simply dissolved in this solid, insoluble framework." *Id.* at 445. "As much as 25% of many coals consists of small molecules that will dissolve in a favorable solvent and can thereby be removed from the insoluble portion." *Id.* at 444. See also Van Krevelen 598 ("the principle component of [bituminous] coals consists of a porous cross-linked macromolecular network in which a complex mixture of soluble molecules is intimately sorbed"); see generally Levine Aff., JA 342-353; Levine, *Coal Composition, as Related to the Mode of Occurrence of "Coalbed Methane"* (1992) (Levine Rep.) (JA 580-593).

For this reason, scientists describe coal as having a "colloidal" structure[2] consisting of a rigid macromolecular "matrix" component and a dispersed "molecular" or "mobile" component. See, *e.g.*, Van Krevelen 193, 598; see also Levine Rep., JA 584-593; Bend Aff., JA 305-308; Marsh Aff., JA 381-386. Each of those components plays a role in determining a particular coal's characteristics, Van Krevelen 598, and neither phase is entirely static or homogeneous, Levine Rep., JA 588. The coalification process, which gradually transforms lower rank coals to higher ranks, continuously alters the composition and characteristics of each component. See, *e.g.*, Levine Rep., JA 605-608; Levine Aff., JA 347-348. Throughout that gradual process, coal remains a complex mixture consisting of an extended macromolecular

[2] Colloids are "systems" made up of a combination of liquids, gases, or solids in which one phase is dispersed in another. See, *e.g.*, 1 *Van Nostrand's Scientific Encyclopedia* 697-700 (7th ed. 1988). For example, milk is a colloid consisting of a solid dispersed in a liquid, vinaigrette is a colloid consisting of a one liquid dispersed in another insoluble liquid, and jam is a colloid consisting of a liquid dispersed in a solid. See *ibid.* Viewed from this perspective, coal is a "solid colloid" consisting of gaseous and liquid hydrocarbons dispersed within the solid macromolecular matrix. See Van Krevelen 193, 598.

matrix held together by stronger, covalent bonds, and a mobile phase, consisting of a mixture of smaller molecules that are held within that macromolecular framework through physical constrictions, hydrogen bonding, and Van der Waals forces. See Levine Rep., JA 586-587; Bend Aff., JA 308; Marsh Aff., JA 381-387 (explaining covalent bonds and van der Waals forces).

3. The smallest of the organic molecules present in the mobile phase is methane (CH_4). When present in coal beds, the methane (together with small amounts of other coexisting gases) is commonly denominated as coal bed methane (CBM). See, *e.g.*, Levine Rep., JA 594. Like the other organic materials present in coal beds, CBM is a product of the coalification process. *Id.* at 605-608. At standard temperature and pressure, CBM exists as a gas. *Id.* at 595. But when formed in a coal seam, CBM is adsorbed within the pore structure created by the macromolecular matrix and exhibits a density similar to that of liquid methane. Marsh Aff., JA 393; see Levine Rep., JA 610.[3]

More so than larger organic molecules dispersed within the macromolecular matrix, CBM can migrate over time, particularly if the coal seam is fractured or if it is subject to changes in temperature and pressure. Those changes alter the equilibrium within the coal bed, counteract the electrostatic forces that fix the CBM in the adsorbed state, and convert the CBM to free gas that can migrate through the

[3] Petitioners assert that CBM "is simply natural gas." Pet. Br. 12. But as petitioners acknowledge, the term "natural gas" is generally used to describe "the gaseous phase of petroleum." Hunt, *Petroleum Geochemistry and Geology* 185 (2d ed. 1996). See Pet. Br. 8. Petitioners are correct that CBM and natural gas both consist of a mixture consisting primarily of methane. *Id.* at 9, 12. But we apply the term CBM specifically to the methane-rich mixture that is produced through the coalification process and that remains within the coal bed. That is the only substance at issue here. See Pet. App. 18a note 8.

pores and out of the coal's macromolecular matrix. See Levine Rep., 595-596. Energy companies have developed technology to produce CBM from coal beds through fracturing and creation of pressure or temperature gradients. *Ibid.*; Marsh Aff., JA 395; Levine Aff., JA 351-352. The current controversy centers on whether CBM produced in this manner should be treated, for purposes of the Coal Lands Act of 1909 and the Coal Lands Act of 1910, as part of the coal or as a separate mineral estate.

B. The Statutory Basis For The Competing Ownership Claims

The competing claims to ownership of CBM arise from two congressional enactments in the early twentieth century, the Coal Lands Act of 1909, ch. 270, 35 Stat. 844, and the Coal Lands Act of 1910, ch. 318, 36 Stat. 583. Congress enacted those statutes to allow homesteaders to obtain patents to public lands that the United States believed to be valuable for coal, while reserving the coal itself in federal ownership. The genesis of those statutes is described in *Watt* v. *Western Nuclear, Inc.*, 462 U.S. 36, 47-49 (1983), as well as other sources. See, *e.g.*, Swenson, *Legal Aspects of Mineral Resources Exploitation* (Swenson), *in* Gates, *History of Public Land Law Development* 699, 724-730 (1978) (Gates).

1. During the latter half of the nineteenth century, Congress made unappropriated public lands available for settlement through the Homestead Acts, see, *e.g.*, Act of May 20, 1862, ch. 75, 12 Stat. 392, and the Desert Land Acts, see, *e.g.*, Act of Mar. 3, 1877, ch. 107, 19 Stat. 377 (43 U.S.C. 321-323), which enabled settlers to obtain a land patent by entering and cultivating tracts of prescribed size for a period of years. See Gates 387-434. Congress exempted from entry under those Acts, however, public land classified as valuable for coal. *Western Nuclear*, 462 U.S. at 47- 48. Coal lands instead

could be purchased under the Coal Lands Act of 1864, ch. 205, 13 Stat. 343, and the Coal Lands Act of 1873, ch. 279, 17 Stat. 607 (see 30 U.S.C. 71 *et seq.*). See generally Swenson 724-725.

The process of segregating agricultural lands from coal lands proved unsuccessful because coal lands were frequently misclassified as a result of mistake or outright fraud. *Western Nuclear*, 462 U.S. at 48 note 9. In 1906, President Theodore Roosevelt withdrew from all forms of entry approximately 64 million acres of lands thought to contain coal, "citing the prevalence of land fraud and the need to dispose of coal 'under conditions which would inure to the benefit of the public as a whole.'" *Id.* at 48-49 (quoting 41 Cong. Rec. 2615 (1907)). President Roosevelt later "urged Congress that 'rights to the surface of the public land . . . be separated from rights to forests upon it and to minerals beneath it, and these should be subject to separate disposal.'" *Id.* at 49. By enacting the Coal Lands Act of 1909 and the Coal Lands Act of 1910, Congress took the first in a series of steps to effectuate that separation, which has resulted in preserving the public's ownership of a significant share of the Nation's energy resources. *Id.* at 49 & note 10; see Swenson 725-729.

The 1909 Act answered the concerns of individuals who had in good faith made agricultural entries onto tracts subsequently identified as coal lands. The Act permitted the entryman to receive a patent to his tract, but required the patent to contain a reservation to the United States "of all coal in said lands, and the right to prospect for, mine, and remove the same." 35 Stat. 844 (currently codified at 30 U.S.C. 81). The 1910 Act opened the remaining coal lands for entry under the homestead laws, allowing "actual settlers," upon proof of compliance with the homestead laws, to receive patents to the surface of those lands. § 1, 36 Stat. 583. As in the case of the 1909 Act, the patents contained a

reservation to the United States "of all the coal in the lands so patented, together with the right to prospect for, mine, and remove the same." § 3, 36 Stat. 584 (currently codified at 30 U.S.C. 83-85).

The Coal Lands Acts reserved to the United States *all* coal in the lands, including "coal that is of but little present commercial value," and confined the entries allowed on coal lands to "settlement and development entries in order that none of the so-called speculative entries may be made on the surface of coal land." 45 Cong. Rec. 6042 (1910) (Rep. Mondell). The purpose of the statutes was "the separation of the surface title, which is fitted for agriculture, from the coal measures lying beneath the surface." 45 Cong. Rec. 7453 (1910) (Sen. Dixon).[4]

---

[4] Congress also took other steps during the same era to preserve public ownership of mineral resources. In 1910, Congress enacted the Pickett Act, which affirmed the President's authority to withdraw public lands for waterpower sites, irrigation, classification of lands, or other public purposes. Act of June 25, 1910, ch. 421, 36 Stat. 847. During the early part of this century, the President exercised Pickett Act authority as well as inherent withdrawal authority in the interest of natural resource conservation. See *United States* v. *Midwest Oil Co.*, 236 U.S. 459 (1915). And in the years following enactment of the Coal Lands Acts, Congress enacted a series of additional statutes to reserve other nonmetaliferous minerals.

In 1912, Congress enacted a statute allowing agricultural entry on lands withdrawn or classified as valuable for petroleum in the State of Utah, reserving "the oil and gas in such lands" and "the right to prospect for, mine, and remove the same." Act of Aug. 24, 1912, ch. 367, § 1, 37 Stat. 496. In 1914, Congress enacted the Agricultural Entry Act, which generally allowed agricultural entry of lands identified as valuable for phosphate, nitrate, potash, oil, gas, or asphaltic minerals, subject to a reservation of "the deposits on account of which the lands were withdrawn or classified or reported as valuable." Ch. 142, § 1, 38 Stat. 509 (currently codified at 30 U.S.C. 121-123). And in 1916, Congress enacted the Stock-Raising Homestead Act, ch. 9, 39 Stat. 862 (currently codified as 43 U.S.C. 291 *et seq.*), which authorized the issuance of patents subject to a

2. The lands opened for settlement under the Coal Lands Acts of 1909 and 1910 included lands within the Southern Ute Indian Reservation in Colorado. In 1880, the members of the Southern Ute Indian Tribe agreed to sell a large portion of their land within the Reservation to the United States, excepting certain allotted lands "provided for their settlement." Act of June 15, 1880, ch. 223, 21 Stat. 200. Congress directed that the ceded, unallotted reservation lands be treated as public lands, and it opened those lands to entry for non-Indian settlement under the homestead laws. See § 3, 21 Stat. 203. See generally *United States* v. *Southern Ute Tribe*, 402 U.S. 159, 162-164 (1971). The ceded territory included lands that President Roosevelt later withdrew from entry and that Congress made available for surface patenting under the 1909 and 1910 Acts.

In 1938, under the authority of the Indian Reorganization Act of 1934, ch. 576, 48 Stat. 984 (25 U.S.C. 461-479), the United States restored to the Tribe, in trust, title to the ceded reservation lands that had not been disposed of, including the reserved coal. Pet. App. 109a. As a result of that restoration, the Tribe now has equitable title to tribal lands within its Reservation and the coal estate beneath lands within the Reservation that were settled by non-Indians under the 1909 and 1910 Acts. Petitioners, by contrast, own the non-coal portions of the lands conveyed under the 1909 and 1910 Acts or, alternatively, hold mineral leases from those owners, limited to non-coal resources of those lands. *Id.* at 109a-110a.

C. The Current Controversy

The energy shortages of the 1970s prompted investigation into alternative fuel sources, including the possibility of

---

reservation of "the coal and other minerals in the lands," § 9, 39 Stat. 864. See *Western Nuclear*, *supra*.

extracting CBM from coal. Questions arose, however, over who owned the CBM if the owner of the fee had severed, by sale or reservation, a coal estate or a gas estate from the remainder of the fee. That issue could arise under federal law, by virtue of the 1909 and 1910 Acts as well as under the Agricultural Entry Act of 1914, 30 U.S.C. 121-123, which reserved "gas" to the United States. Related questions about the status of CBM could also arise under the Mineral Leasing Act of 1920, 30 U.S.C. 181 *et seq.*, which provides for leasing of both coal and gas. CBM ownership issues could also arise under state law by virtue of an individual owner's decision to lease or reserve coal or gas. See, *e.g.*, Farnell, *Methane Gas Ownership: A Proposed Solution for Alabama*, 33 Ala. L. Rev. 521 (1982).[5]

1. In 1981, the Solicitor of the Interior issued an opinion entitled *Ownership of and Right to Extract Coalbed Gas in Federal Coal Deposits*, 88 Interior Dec. 538 (Pet. App. 140a-159a). The Solicitor determined that he should address the issue because "the unresolved legal status of coalbed gas on federal lands and in federal coal has hindered any decision on how, and under what right of extraction, it can be developed." Pet. App. 142a. The Solicitor concluded that: (1) the 1909 and 1910 Acts did not reserve the coal bed gas found in the reserved coal; (2) the reservation of gas under the Agricultural Entry Act included coal bed gas; and (3) coal bed gas is disposable under the oil and gas leasing provisions of the Mineral Leasing Act. See *id.* at 143a. The Solicitor

---

[5] See also, *e.g.*, Bowles, *Coalbed Gas: Present Status of Ownership Issue and Other Legal Considerations*, 1 E. Min. L. Inst. 7-1 (1980); Craig & Myers, *Ownership of Methane Gas in Coalbeds*, 24 Rocky Mtn. Min. L. Inst. 767 (1978); McGinley, *Legal Problems Relating to Ownership of Gas Found in Coal Deposits*, 80 W. Va. L. Rev. 369 (1978); Olson, *Coalbed Methane: Legal Considerations Affecting Its Development As An Energy Resource*, 13 Tulsa L.J. 377 (1978).

cautioned, however, that "nothing in this opinion warrants title to any oil and gas deposit." *Id.* at 159a.

2. Ten years later, on December 31, 1991, the Tribe filed this action against petitioners and others who asserted a right to recover CBM from the Tribe's coal deposits in lands patented pursuant to the 1909 and 1910 Coal Lands Acts. The Tribe sought a declaration that it is the sole owner of the CBM that resides within the coal seam, and it sought damages for the alleged trespass and conversion of the Tribe's property. The Tribe also sued the United States, seeking a declaration that the United States owed a duty to the Tribe to protect and manage CBM development for the Tribe. See JA 171-179.[6]

Petitioners responded that the reservation of "all coal" in the 1909 and 1910 Acts did not include CBM, and they also raised other affirmative defenses. The United States concurred in petitioners' interpretation of the two Acts, relying on the 1981 Solicitor's opinion, and additionally asserted that the Tribe's breach of trust claim against the United States was barred by the applicable six-year statute of limitations, 28 U.S.C. 2401(a), in light of Tribe's past history of CBM development and its knowledge of the Solicitor's 1981 opinion.

3. The district court ruled on cross-motions for summary judgment that "Congress did not reserve CBM gas in the United States in the Coal Lands Acts of 1909 and 1910 and, consequently, [the Tribe's] claim of equitable ownership of CBM gas in the lands at issue fails." Pet. App. 98a. The court concluded, on the basis of dictionary definitions that

[6] The Tribe additionally filed suit against the United States in what is now the United States Court of Federal Claims, alleging that the United States had breached its trust obligation to protect the Tribe's interest in property with respect to development of the CBM. See U.S. C.A. Br. 26 note 7.

describe coal as a "solid" or "rock," that the 1909 and 1910 Acts do not include CBM. *Id.* at 110a-116a. The court also concluded that the legislative history of those Acts, which made no reference to CBM, supported that interpretation. *Id.* at 116a-127a.[7]

4. The court of appeals reversed the district court's judgment and remanded for further proceedings. Pet. App. 52a-94a. The court of appeals reasoned that the question of CBM ownership "cannot be disposed of by the simple tautology that gas is gas," *id.* at 63a-64a, because Congress could have reasonably viewed adsorbed CBM as "an integral part of the coal," *id.* at 64a. The court concluded that the 1909 and 1910 Acts manifested no specific intent to convey CBM, *id.* at 66a, and that those Acts manifested a general intent to reserve the federal government's entire economic interest in the coal deposits, *id.* at 71a-72a. Those considerations, "coupled with the principle of statutory construction that resolves ambiguity in favor of the sovereign," see, *e.g.*, *Western Nuclear*, 462 U.S. at 59, persuaded the court that "CBM was reserved to the United States." Pet. App. 72a.

5. Petitioners sought rehearing en banc, and the en banc court granted rehearing limited to the question "whether 'coal' as used in the Coal Lands Act of 1909 and 1910 unambiguously excludes or includes CBM." Pet. App. 8a. By a vote of six to three, the en banc court adhered to, and supplemented, the reasoning of the unanimous panel. *Id.* at 1a-51a; see *id.* at 8a-9a. The en banc court held that the term

[7] The district court did not address affirmative defenses, including the United States' assertion that the action against the United States was barred by the applicable statute of limitations. See Pet. App. 130a-131a. The district court correctly rejected the Tribe's invocation of the principle that doubts regarding the interpretation of statutes be resolved in favor of the Indians in this case. As the district court pointed out, the Acts are public land laws, not statutes passed for the special benefit of Indians. *Id.* at 127a.

"'coal' as used in the Coal Lands Acts of 1909 and 1910 neither unambiguously includes or excludes coal bed methane. Given the established principle that all doubts respecting land grants and mineral reservations are construed in favor of the government, *see Watt v. Western Nuclear, Inc.*, 462 U.S. at 59," the en banc court concluded that "coal reserved to the United States in the 1909 and 1910 Acts includes the adsorbed CBM." Pet. App. at 32a-33a. In reaching the conclusion that the 1909 and 1910 Acts are ambiguous, the en banc court surveyed the language of those Acts, *id.* at 11a-14a, contextual indicia of Congress's specific intent, *id.* at 14a-24a, and indicia of Congress's general intent drawn from the legislative history and related statutes, *id.* at 24a-32a. Three judges dissented, reasoning that "coal was not understood, either in 1909 or today, to include a gas." *Id.* at 34a; see *id.* at 34a-51a.[8]

SUMMARY OF ARGUMENT

The Tenth Circuit, sitting en banc, correctly concluded that Congress's reservation of "all coal" in the Coal Lands Acts of 1909 and "all the coal" in the Coal Lands Act of 1910 includes coal bed methane (CBM). In accordance with this Court's guidance, the court carefully evaluated the language of those statutes, the specific context in which the language was used, and the broader context of the Acts as a whole.

[8] The United States did not petition for rehearing en banc. After rehearing en banc was granted, the United States filed a supplemental brief explaining that it had previously endorsed petitioners' arguments on the basis of the 1981 Solicitor's opinion and not merely on the basis that the question of CBM ownership should be resolved by reference to the dictionary meaning of the term "coal." See Pet. App. 9a note 2. The United States additionally explained that, in light of the panel's decision, the Solicitor of the Interior had commenced a review of the analysis set out in the 1981 Solicitor's opinion and that the review could conceivably result in modification of the views expressed therein. *Ibid.*

See *Robinson* v. *Shell Oil Co.*, 519 U.S. 337, 341 (1997). The court of appeals determined that Congress did not express any intent, whether by clear language or by necessary or fair implication, to convey away the public's ownership of CBM, which is one of the natural constituents of coal. Petitioners' contrary contention, which ultimately rests on the mantra that "coal" means "*solid* coal" (Pet. Br. 20), does not withstand careful scrutiny.

A. Congress's use of the term "coal," taken in its ordinary sense at the time the Coal Lands Acts were enacted, referred to the carbonaceous substance that nature deposited in the form of coal seams and that miners removed as a source of fuel. That substance always contains, as an essential constituent, CBM. The scientific literature confirms what Congress and the general public knew as a matter of practical experience and common sense: coal has aggregate characteristics of a solid, but it consists of a mixture of solid, liquid, and gaseous constituents, including CBM. It would not only be completely unnatural to construe the term "coal" as limited to "solid coal," but it also would raise a host of practical problems and definitional inconsistencies. For example, coal contains both moisture and liquid coal extracts, which are undeniably constituents of coal. Yet, under petitioners' novel definition, Congress did not include those constituents within the coal reservation because they are not "solid coal."

The historical context also supports the court of appeals' judgment. Congress had no reason to separate from the coal, as a matter of law, a constituent that could not be readily separated as a matter of practical fact. Indeed, an important coal technology of that era—the gas producer—actually utilized the CBM. The legislative history contains no discussion of CBM, and the most reasonable inference from the floor colloquies is that Congress viewed CBM as a component of coal and not as "natural gas." The court of appeals'

judgment also finds support in the way that contemporary state law treated both fixed minerals and gas. See, *e.g.*, *Kansas Natural Gas Co.* v. *Board of County Comm'rs*, 89 P. 750, 752 (Kan. 1907) ("until gas is actually produced and severed so that it becomes personalty the legal title to, and possession of, the entire volume remain in the owner of the strata in which it is confined"). It therefore comes as no surprise that the majority of state courts that have confronted the practical realities of CBM production have rejected petitioners' position that a coal estate does not include CBM.

B. The en banc court properly rejected petitioners' assertion that their proposed construction of the term "coal" is so plainly correct as to be "clear as day." Pet. Br. 43. Having carefully applied this Court's guidance on statutory construction, and finding no basis for inferring that Congress intended to convey a constituent of coal to homesteaders, the court of appeals properly invoked the "established rule" that doubts respecting Congress's intent should be resolved in favor of retaining public ownership. See, *e.g.*, *Watt* v. *Western Nuclear, Inc.*, 462 U.S. 36, 59 (1983). Petitioners do not contest the validity of that principle; they argue only that it should not be applied here. But that contention is not substantial in light of the absence of any clear expression of congressional intent to convey the CBM component of coal deposits. Indeed, application of the canon of construction here furthers its fundamental purpose, by reserving to Congress the power and responsibility to weigh the competing policy considerations bearing on whether to dispose of that property of the United States.

C. At the commencement of this litigation, the United States had supported petitioners' position, based on the reasoning contained in the 1981 opinion of the Solicitor of the Interior. This litigation—the first instance in which that opinion has been subject to the adversarial process—has

revealed that the Solicitor's 1981 decision is mistaken. The Solicitor has therefore withdrawn that opinion. Contrary to petitioners' assertions, there is nothing improper in the Solicitor's reexamination of an opinion in light of the insights gained in the course of attempting to defend it in litigation. To the contrary, it is entirely appropriate for the United States to decline to defend a legal position before this Court when an en banc court of appeals has rejected it and the government has concluded that the position is wrong.

ARGUMENT

THE COURT OF APPEALS CORRECTLY RULED THAT THE COAL LANDS ACTS OF 1909 AND 1910 DO NOT GRANT THE PATENT HOLDER A RIGHT TO EXTRACT COAL BED METHANE FROM THE RESERVED COAL

Introduction

Petitioners and the Southern Ute Indian Tribe each claim a right to the coal bed methane found in the coal deposits that Congress reserved through the Coal Lands Acts of 1909 and 1910 and later conveyed to the Tribe. The issue, simply put, is whether CBM is a part of the coal reservation. Petitioners argue that the Congress did not intend to reserve CBM, reasoning that CBM is merely unreserved natural gas that happens to be found in coal seams and that passed into the hands of homesteaders who acquired the coal-bearing lands subject to the federal government's reservation of the coal deposits. The Tribe argues that Congress did intend to reserve CBM, reasoning that CBM is a constituent of the reserved coal that the Tribe acquired from the federal government.

The en banc court of appeals properly framed the issue as one of construing the Coal Lands Acts. Pet. App. 10a. Finding that "[t]he Acts neither define coal nor mention CBM,"

the court of appeals evaluated the issue of CBM ownership based on "traditional tools of statutory construction." *Id.* at 14a. The court first examined the relevant statutory language in light of its specific context, taking into account the historical definitions of "coal" (*id.* at 14a-17a), the then-current knowledge of coal's characteristics (*id.* at 17a-21a), and the state courts' treatment of CBM ownership (*id.* at 21a-24a). The court of appeals then evaluated the statutory language based on the general context of the Acts as a whole (*id.* at 24a-27a), taking into account the statutory objectives, the legislative history, and related statutes that could shed light on Congress's intent in enacting the Coal Lands Acts (*id.* at 27a-31a). After considering all of those sources, the court of appeals concluded that the Coal Lands Acts are ambiguous with respect to Congress's intent to grant or convey CBM, and it applied the "'established rule that land grants are construed favorably to the Government, that nothing passes except what is conveyed in clear language, and that if there are doubts they are resolved for the Government, not against it.'" *Watt* v. *Western Nuclear, Inc.*, 462 U.S. 36, 59 (1983) (quoting *United States* v. *Union Pac. R.R.*, 353 U.S. 112, 116 (1957)). See Pet. App. 10a-11a, 24a, 32a-33a.

The court of appeals' decision is thorough, well reasoned, and faithful to this Court's guidance respecting statutory interpretation. Contrary to petitioners' hyperbole, the six-member majority has not "summarily dispensed with an analysis of the statutory language" (Pet. Br. 17), "mis[read] contemporary texts" (*id.* at 21), disregarded "the language and traditional tools of statutory construction" (*id.* at 42), or "refus[ed] to give the term 'coal' its plain meaning" (*ibid.*). To the contrary, the court's analysis, first in the unanimous panel opinion and later in the en banc decision, prompted the government to reexamine the merits of the position that it had put forward below. The court raised formidable

questions about the correctness of the Solicitor's 1981 opinion. After careful consideration of those questions, the government determined that the 1981 opinion was incorrect and should not be defended before this Court.

Petitioners raise a number of new arguments in support of their view that Congress's coal reservation unambiguously excludes CBM, but those arguments are unpersuasive in salvaging what, upon close inspection, has proven to be a mistaken view of the law. We will begin where the court of appeals' decision left off and provide, point-by-point, the counter-arguments that compel us to reject petitioners' contention that the term "coal" unambiguously excludes CBM. We will then explain why the canon of construction that ambiguous federal grants should be construed in favor of the government not only applies, but has special force in this case. Finally, we will respond to petitioners' charge that the Solicitor has acted improperly in withdrawing the 1981 opinion.

A. The 1909 And 1910 Acts Do Not Unambiguously Convey Away Public Ownership Of CBM

"The plainness or ambiguity of statutory language is determined by reference to the language itself, the specific context in which that language is used, and the broader context of the statute as a whole." *Robinson* v. *Shell Oil Co.*, 519 U.S. 337, 341 (1997). No one disputes that the starting point is the language, Pet. App. 11a, that legislative intent normally "is expressed by the ordinary meaning of the words used," *United States* v. *Locke*, 471 U.S. 84, 95 (1985), or that the statutory language frequently reveals that Congress has dealt with "a practical subject in a practical way," *Burke* v. *Southern Pac. R.R.*, 234 U.S. 669, 679 (1914). See Pet. Br. 21-22. Each of those factors weighs in favor of the court of appeals' judgment and against petitioners' arguments. There is also no dispute that it is appropriate to consider

other portions of the Coal Lands Acts (*id.* at 25-27), and the "historical context" of the Acts (*id.* at 27-41). As the court of appeals concluded, those considerations also weigh against petitioners' construction. See Pet. App. 14a-33a.

1. *The Term "Coal" Has Never Been Understood To Refer Only To What Petitioners Call "Solid Coal."* When Congress reserved "all coal" in the 1909 and 1910 Acts, neither Members of Congress nor the public needed to consult a dictionary to comprehend the basic thrust of the legislation. The Coal Lands Acts reserved in public ownership the familiar carbonaceous substance that miners removed from the ground and the public used for fuel and other purposes. See United States Geological Survey, Dep't of the Interior, *Contributions to Economic Geology 1906* (Pt. 2) (1907) (JA 403-405) (describing the importance of coal to the American economy). Congress and the public knew then, as now, that the substance called coal is not a homogeneous compound, but rather is a complex mixture of organic components. See, *e.g.*, VI *Encyclopaedia Britannica* 575 (11th ed. 1910). It was also common knowledge that coal, both when in the ground and when removed, contains gaseous constituents—including the material, now called CBM, that is at issue in this case. See, *e.g.*, Bureau of Mines, Dep't of the Interior, *The Escape of Gas from Coal* (1911) (JA 510, 521-522). Indeed, it was impossible for miners to remove coal without also removing the inextricably adsorbed CBM, portions of which lingered for months in the mined coal as the gaseous constituents—primarily methane—came into equilibrium with the ambient air. See, *e.g.*, JA 521-522.

It follows that, if the benchmark for determining the scope of Congress's reservation is the ordinary meaning of the term "all coal," then the 1909 and 1910 Acts reserved the entire coal product that miners remove from the coal seam, including the adsorbed hydrocarbon gases that are invariably present both as part of the coal deposit in the ground and

as part of the mined product. As the Kansas Supreme Court rightly observed in 1907, the term "'minerals therein' can mean none other than minerals imbedded in the earth as nature deposited them." *Kansas Natural Gas Co.* v. *Board of County Comm'rs*, 89 P. 750, 751 (Kan. 1907). The same holds true for coal. CBM is "one of the several products of coalification," and so long as it resides in the coal seam, it "cannot logically be considered as being in any way different from other products of coalification." Marsh Aff., JA 398.

The ordinary meaning of "coal" is the practical one as well. If Congress meant to deal with a "practical subject in a practical way," *Burke*, 234 U.S. at 679, it would not have limited its reservation to what petitioners call the *"solid* coal" (*e.g.*, Pet. Br. 20) (emphasis in original) and conveyed to others the inextricably adsorbed component that the miner necessarily removed as part of the mined product. As the court of appeals pointedly stated, "it seems to us quite unlikely that Congress, if it had considered the matter, would have reasoned, 'We want the Government to hold on to the solid bituminous core of these coal deposits, but we make no claim to the thin layer of molecules of CBM which coats the surfaces.'" Pet. App. 19a-20a.

Petitioners urge the opposite conclusion by recourse to current and historic dictionaries and texts that describe "coal" as a "rock" or "solid." Pet. Br. 7-8, 22-25; see, *e.g.*, Van Krevelen, *supra*; II *Century Dictionary & Cyclopedia* 1067 (1906-1909). Petitioners reason that, if coal is a rock or solid, then its reservation cannot include adsorbed CBM, which—when separated from the remainder of the coal—exists as a gas. See Pet. Br. 22-25. As this Court has cautioned, however, "ordinary definitions of the dictionary" may "throw but little light upon" congressional intent in reserving naturally occurring substances. *Western Nuclear*, 462 U.S. at 42-43. Dictionaries can be useful aids in statutory interpretation, but they are no substitute for close analysis of what words

mean as used in a particular statutory context: "it is a 'fundamental principle of statutory construction (and, indeed, of language itself) that the meaning of a word cannot be determined in isolation, but must be drawn from the context in which it is used.'" *Reno* v. *Koray*, 515 U.S. 50, 56 (1995); *Deal* v. *United States*, 508 U.S. 129, 132 (1993). As we explain below, petitioners have selectively read dictionary definitions that are themselves ambiguous on the question presented here. And even if those dictionary definitions were more helpful, petitioners' proposed construction would present a confounding variety of definitional, interpretive, and practical problems.

a. Petitioners' argument is problematic at the outset because current and historical dictionaries that describe coal do not uniformly describe it as a "rock" or "solid." As the court of appeals pointed out, the dictionaries and texts actually describe coal in diverse ways that, taken as a whole, simply highlight that coal is a complex mixture of hydrocarbon compounds. See Pet. App. 16a-17a (citing, for example, VI *The American Cyclopaedia: A Popular Dictionary of General Knowledge* 726 (Ripley & Dana eds. 1873); VI *Encyclopaedia Britannica* 575 (11th ed. 1910); *New Standard Dictionary of the English Language* 508 (1913)). See also Levine Aff., JA 344-345; Marsh Aff., JA 371-381. The variety of prevalent descriptions demonstrates that coal cannot be accurately described through petitioners' selective reliance on one or two words. See *National R.R. Passenger Corp.* v. *Boston & Maine Corp.*, 503 U.S. 407, 418-419 (1992) ("The existence of alternative dictionary definitions * * *, each making some sense under the statute, itself indicates that the statute is open to interpretation.").

Even if the dictionaries and texts were more uniform in using the terms "solid" or "rock" to describe coal, it would be unsound to isolate and rely selectively on those terms to answer the question presented here. Petitioners' dictionaries and texts use the terms "rock" or "solid" to describe either the appearance or the specific petrographic characteristic of coal—they do not use those terms to define the composition of coal or the relationship between coal and CBM.[9] Indeed, the sources that petitioners themselves cite for the proposition that coal means "*solid* coal" quite specifically contradict petitioners' facile assertion that, with respect to the issue presented here, "the meaning of 'coal' is clear as day." Pet. Br. 43.

For example, Van Krevelen's comprehensive text, *Coal*, observes at the very outset that there is a "diversity of scientific approaches" for characterizing coal depending on the purpose of the scientific inquiry:

> Coal is a rock, a sediment, a conglomerate, a biological fossil, a complex colloidal system, an enigma in solid-state physics and an intriguing object for chemical and physical analyses.

Van Krevelen 4. Van Krevelen devotes the first 10 chapters of his book to explaining each of those different perspectives. *Id.* at 5-332. He ultimately states that current scientific knowledge indicates that "the *principal component* of [bituminous] coals consists of a porous cross-linked macromolecular network in which *a complex mixture of soluble molecules is intimately sorbed.*" *Id.* at 598 (emphasis added). Accord Larson & Gorbaty 444-445; Bend Aff., JA 305-306; Levine Aff., JA 346-347; Marsh Aff., JA 385-387; see also C.A. App. 803-811 (Marsh's pictorial illustrations of coal's molecular structure). That description stands in stark contrast to petitioners' simplistic and scientifically unsound assertion

---

[9] The various Interior Department regulations and publications that petitioners cite follow that pattern as well. See Pet. Br. 24. Those regulations and publications simply describe the general appearance and classification of coals; they do not speak, one way or the other, as to whether CBM is a constituent of coal.

that coal is a "solid" or "rock" and its reservation therefore cannot include CBM.[10]

Petitioners' contention is particularly dubious because, at the time that Congress acted, government geologists knew and had informed Congress that coal contained hydrocarbon gases, including gases that may be present in an "occluded" state. The United States Geological Survey (USGS) reported to Congress, in H.R. Doc. No. 1538, 60th Cong., 2d Sess. (1909), as follows:

> The gas which escapes from coal may exist within the mass of the coal in three possible conditions. It may be mechanically held or imprisoned in minute pores, cavities, or cracks throughout the coal; it may be occluded or dissolved within the substance of the coal; or it may be the result of slowly operating chemical reactions, such as the those which have produced the coal from the original vegetable matter.

USGS, Dep't of the Interior, *Notes on Explosive Mine Gases and Dusts, with Special Reference to Explosions in the Monongah, Darr, and Naomi Coal Mines* (1909) (JA 433); accord Bureau of Mines, Dep't of the Interior, *The Escape of Gas From Coal* (1911) (JA 511-513). See also Chamberlin, *The Gases in Rocks* 35, 57-61 (1908) (describing "occluded gases"). Hence, the government's geologic experts of that era had directly related to Congress that coal was not a homogeneous solid, but in fact contained gaseous constituents, and they presciently recognized that the gas might "be occluded or dissolved within the substance of the coal." Indeed, the USGS report quite clearly treated even mechanically held gas as a constituent of the coal. The report

[10] Although petitioners cite Van Krevelen's text (Pet. Br. 7) for the proposition that coal is a "rock," they fail to mention the more pertinent portions of his book.

noted that heating coal "caused the expulsion of *such uncombined gas as was ready to escape at ordinary temperatures*, and in addition developed some new gas from *the nongaseous constituents* of the coal." JA 468 (emphasis added).

Those scientists understood that there is nothing unusual in the fact that a "solid" substance can have gaseous constituents. Indeed, it is commonplace to use terms such as "solid," "liquid," or "gas" to describe the aggregate or predominant qualities of a substance that consists of a mixture of solid, liquid, and gaseous ingredients.[11] The same holds true for coal. Congress reserved "coal" by name, and it is reasonable to interpret "coal" to include all of coal's naturally co-existing constituents, including components that would be liquids or gases if physically separated from the coal.

b. Petitioners' reasoning is also unsound in light of its practical consequences. Petitioners' assertion that Congress reserved only "*solid* coal" would necessarily lead to the untenable conclusion that Congress not only failed to reserve CBM, but that it also failed to reserve other sorbed coal components, including water and "volatile" matter, that are commonly present in, and treated as components of, coal.[12]

[11] Many organic and inorganic substances that might be described for definitional purposes as either "solid" (*e.g.*, wood, resin, cheese, paste, peanut butter, and jelly) or "liquid" (*e.g.*, glue, petroleum, salad dressing, paint, ink, milk, and mineral water) consist of a mixture of two or more coexisting liquid, gaseous, or solid components. Similarly, a substance that might be described as a "gas"—such as the ambient air or the exhaust gases of a car, fireplace, or other combustion process—may include solid particulates and droplets of moisture. The fact that a substance might be characterized in aggregate as a solid, liquid, or gas does not mean that the other, less obvious components are not essential constituents. See also note 2 (discussing colloidal systems).

[12] See American Geological Institute, *Dictionary of Geological Terms* (1980) (JA 372) (defining coal as "a readily combustible rock containing more than 50% by weight and more than 70% by volume carbonaceous

Indeed, the ASTM standards for classifying coal (see page 3, *supra*), distinguish varieties of coal on the basis of a number of factors, including the presence of "moisture" and "volatile" matter. It would be quite strange to conclude that Congress's reservation of coal did not extend to coal components that determine the identifying characteristics of different coals. See Marsh Aff., JA 372, 377, 379-381, 387-388, 393, 398.[13]

Petitioners' reasoning that Congress reserved only "*solid* coal" would also lead to the even more extraordinary result that Congress did not reserve "coal extracts," which include other small hydrocarbon molecules, in addition to CBM, that are present within the macromolecular structure of coal and can be extracted through the use of appropriate solvents. See Van Krevelen 549-600; Larson & Gorbaty 444-445. Coal extracts comprise "[a]s much as 25% of many coals." *Id.* at 444. They "are natural ingredients of the coal" (Van Krevelen 600) and include molecules that would be liquids outside of that macromolecular coal structure. See *id.* at 596-597; see also Larson & Gorbaty 444-445; Levine Rep., JA 590-591; Tissot & Welte, *Petroleum Formation and Occurrence* 248-249 (2d ed. 1984) (Tissot & Welte). Under petitioners' reasoning, Congress failed to reserve those potentially removable "natural ingredients"—and instead gave them to surface homesteaders—because coal extracts are not part of the "*solid* coal."

---

material, including inherent moisture"); see also, *e.g.*, Levine Aff., JA 345-346; Bend Aff., JA 304; Marsh Aff., JA 398.

[13] To be sure, the ASTM test for "volatile matter" involves heating the coal and therefore includes both matter that is volatile at ambient temperature and matter that becomes volatile as a result of thermal decomposition. See Levine Rep., JA 595 note 4. Nevertheless, the point remains that, under petitioners' construction, the portion of that "volatile matter" that is not a thermal decomposition product must be considered a non-ingredient of the coal. See Levine Aff., JA 349.

c. Petitioners' attempt to define "coal" as a subset of itself—namely, "*solid* coal"—illustrates the fundamental problem with petitioners' argument. Coal is a complex mixture of solid, liquid, and gaseous hydrocarbons that collectively constitute "coal." It does not exist in the forms of "solid," "liquid" and "gaseous" coal. Coal has the aggregate characteristics of a solid, but it also consists of moisture and liquid and gaseous hydrocarbons. It is the infinitely varied combination of its solid, liquid, and gaseous constituents that defines and determines the characteristics of individual coals. See Levine Aff., JA 345-347; Marsh Aff., JA 381-388; Bend Aff., JA 304-305. Hence, it should come as no surprise that, when Congress has defined the term "coal" in other statutory contexts, it has consistently done so by reference to the varieties of coal that embody those naturally occurring mixtures of different constituents.[14]

At bottom, what petitioners really mean by "solid coal" is "degasified coal"—the non-naturally occurring substance that their exploitation of CBM would leave behind. Indeed, petitioners apparently coined the term "solid coal" solely for the purpose of this case. Tomkeieff's lexicon of coal nomenclature, *Coals & Bitumens* (1954) (Tomkeieff), which petitioners cite (see Br. 9), contains hundreds of descriptive coal terms—including, for example, "stink coal," "tar coal," "mushy coal," "leaf coal," "curly coal," and "smush"—but it nowhere mentions "solid coal." At the same time, that lexicon lists no less than 23 varieties of "high volatiles coal" (Tomkeieff 116), including "gas coal," "bottle coal," and "fat coal," and also defines additional names for such coal,

---

[14] See, *e.g.*, 30 U.S.C. 552 ("'Coal' means any of the recognized classifications and ranks of coal, including anthracite, bituminous, semibituminous, subbituminous, and lignite."); 42 U.S.C. 8302(a)(5) ("The term 'coal' means anthracite and bituminous coal, lignite, and any fuel derivative thereof.").

including "parrot coal" ("from the chattering noise it makes on burning" (*id.* at 73)) and "singing coal" (which describes "coal from which gas escapes with a hissing sound, particularly if the surface of it is wet" (*id.* at 85)).

Tomkeieff's lexicon captures the practical knowledge and understanding of miners and the mining industry. Since the advent of large-scale mining more than a century ago, miners have known that "coal" is a highly variable mixture of substances, that its ingredients can include gaseous components, and that the presence of those gaseous components can be so distinctive as to distinguish one variety of coal from another. The plain and descriptive language of those who work the mines provides additional evidence that petitioners are incorrect in asserting that the 1909 and 1910 Acts unambiguously reserved only what they call the "solid rock" and not the gaseous constituents of the coal.[15]

2. *The "Historical Context" Of The 1909 and 1910 Acts Does Not Support Petitioners' Construction.* Petitioners are wrong in asserting that "the history and context of the 1909 and 1910 Acts, and their place in the progression of public lands statutes, verify that Congress only intended to reserve coal (and not gas) to the United States." Pet. Br. 27.

[15] Petitioners' remaining "plain meaning" argument—that the "surrounding provisions of the 1909 and 1910 Acts" also support their construction (Pet. Br. 25-27)—is without merit. The provisions that petitioners cite say nothing about the matter at issue here: a homesteader could use "coal" for "domestic purposes" (*id.* at 25) and an entryman could contest whether land was properly classified as coal land (*id.* at 25-26) whether or not the reserved "coal" included CBM. The more significant such provisions are those that refer to "coal deposits" (35 Stat. 844). Those provisions suggest that Congress was reserving the coal "beds" or "strata" rather than some ill-defined "solid" subset of those naturally occurring "deposits." See USGS, Dep't of the Interior, *The Valuation of Public Coal Lands* (1910) (JA 505-507) (describing deposits on the basis of beds or strata). See discussion at pages 32-41 *infra*.

Petitioners begin from the mistaken premise, discussed above, that "coal" cannot have gaseous constituents that are reserved as part of the coal. But even apart from that erroneous premise, petitioners' historical presentation provides an incorrect picture of congressional intent. The court of appeals' analysis presents the more accurate view of the historical record. Pet. App. 24a-32a. We supplement the court's treatment with several observations in response to petitioners' specific assertions.

a. Petitioners assert that Congress's reservation of "coal" reflects congressional efforts to redress a crisis in the supply of "*solid* coal" with minimal encroachment on settler property rights. Pet. Br. 27-28. The legislative record, however, does not bear out petitioners' focus on what it calls "*solid* coal." The legislative record of the 1909 and 1910 Acts, including their text and their enactment history, indicates that Congress reserved first "all coal" (35 Stat. 844) and then synonymously "all the coal" (§ 3, 36 Stat. 584) in lands classified as valuable for coal—it says nothing about reserving only the "solid" constituents. Congress did not use petitioners' newly minted term "solid coal," nor did it express a special interest in reserving only "degasified coal." Rather, Congress reserved the totality of coal that nature had deposited in the coal-bearing lands, including coal deposits that were not then valuable, but could be valuable "in the future." See Pet. App. 29a-30a. As the court of appeals observed, Congress had no reason to reserve the entirety of all the coal deposits and at the same time silently exclude potentially valuable gaseous constituents that formed with, and could not be readily separated from, what petitioners call the "solid" coal. *Id.* at 30a.[16]

[16] Indeed, it would have been quite remarkable for Congress to separate ownership of the coal from ownership of CBM in light of the hazards that escaped CBM posed to miners. The coal lessee was generally

Petitioners' argument stands on a particularly weak footing because the historical record indicates that Congress actually had strong practical reasons to reserve the gaseous components of the coal as a potential energy source. At the turn of the century, the United States relied on three primary sources of energy: coal, oil and wood.[17] Natural gas was not yet an important source of energy because there was no pipeline system in existence to transport that commodity to consumers. Nevertheless, coal could be transported, and beginning in the 1800s, it was shipped to cities to make "water gas" and "producer gas" as a source of energy. See Bureau of Mines, Dep't of the Interior, *The Status of the Gas Producer and the Internal-Combustion Engine in the Utilization of Fuels* (1912) (JA 524-526); Perry, *The Gasification of Coal*, 230 Sci. Am., No. 3 (Mar. 1974) (JA 530-534). "Nearly every major city in the eastern U.S. once had its gashouse, where gas was manufactured (usually from coal) for lighting and cooking." JA 530.

The formerly common practice of using coal to make gas is significant, because it demonstrates that Congress had a concrete interest in reserving coal's gaseous components, which were liberated through the coal gasification process

responsible under both federal and state law to protect its miners and the public from the emissions of hazardous mine gases. See, *e.g.*, *Deserant* v. *Cerillos Coal R.R. Co.*, 178 U.S. 409 (1900). Congress had no reason to transfer that CBM, and the potential liability for its release, to the agricultural homesteader, who had no conceivable use for the substance. See Pet. App. 20a-21a.

[17] In 1907, the USGS reported to Congress that "[w]ood already is almost a thing of the past; oil, although used extensively in some parts of the country for the production of power, is necessarily of limited occurrence and before long may cease to be an important factor in the problem. Coal, therefore, is the fuel of the present, and, so far as can be seen, will continue to lead in this particular for a long time to come." H.R. Doc. No. 823, 59th Cong., 2d Sess. (1907) (JA 404).

and used as a component of "producer gas." The first step of the coal gasification process was to heat or "distill" the coal, which "releases a certain amount of gas that has a fairly high B.t.u. content because methane (CH_4) and other higher hydrocarbons contained in the coal are among the first components to emerge as the coal decomposes." JA 532.[18] The yield of liberated methane was relatively small, but the process nevertheless put coal's gaseous components to productive use. In light of that use, it is improbable that Congress, which reserved even coals of no present value, would have intended to exclude coal's gaseous components from its reservation of coal. As the Bureau of Mines pointed out, many low-grade western coals "cannot be used in boiler furnaces and will not bear long transportation, but the gas producer makes them of potential value." JA 526.

Petitioners also argue that the statements of Representative Mondell, one of the sponsors of the Coal Lands Acts, who opposed extending the reservation to other minerals, indicate that Congress did not intend to reserve CBM. See Pet. Br. 29-31. Reliance on the statements of a single legislator is, of course, a hazardous method of determining congressional intent.[19] But, in any event, Representative Mondell's

[18] We note that the author of this article, like other contemporary scientists and the miners and geologists of an earlier era, unhesitatingly treats "methane" and "other higher hydrocarbons contained in the coal" as "components" of the coal. JA 532.

[19] It is particularly hazardous here, because Representative Mondell was generally an opponent of conservation legislation. President Roosevelt described Mondell as "'a Congressman who took the lead in every measure to prevent the conservation of our natural resources" and "who consistently fought for local and private interests as against the interests of the people as a whole.'" Swenson 727 (quoting Roosevelt, *An Autobiography* 363, 393 (1913) (1924 rep.)). Mondell candidly admitted that his perspective reflected a minority view. In a colloquy with other Western representatives, he stated that "we must recognize this fact, that in the country at large public sentiment was behind President Roosevelt, and

views do not support, and actually weigh against, petitioners' interpretation. Mondell did not express any explicit view on whether the term "coal" includes CBM. Petitioners instead look for support from a floor colloquy in which Mondell expressed his opposition to a suggestion that Congress reserve "other fuels, such as gas and oil." *Id.* at 30 (quoting 45 Cong. Rec. 6044 (1910)). Mondell's rationale actually undermines petitioners' argument.

First, Representative Mondell stated that "the answer that really controls here" is that "coal crops out and comes to the surface, and its presence is therefore apparent," while oil and gas are "found here and there." 45 Cong. Rec. 6044 (1910). CBM presents no such difficulties because it, by definition, exists only in the readily recognized coal seams. Second, Mondell added that "[o]il and gas present much greater difficulties, when we propose to separate the surface from the mineral, than coal. *I question whether we should provide for surface entries of such lands.*" *Ibid.* (emphasis added). In other words, he did not view the "coal lands" at issue as containing "oil and gas." Mondell undoubtedly knew what was then common knowledge and what the USGS had made clear to Congress—that coal contains what we now call CBM. See pages 24-25, *supra*. Nevertheless, he plainly did not equate CBM with the natural gas that was the subject of the colloquy. Rather, like the USGS, he apparently viewed CBM as a constituent of the coal.

b. Petitioners next argue that public lands statutes enacted after the Coal Lands Acts demonstrate that Congress did not intend to reserve CBM. Pet. Br. 31-36. Peti-

---

has been behind President Taft, and that the principal complaints that have been made, save those that have been made by some of us from the West, have been not that there was too much withdrawal, but that there was not enough withdrawal, or that there was too much restoration." 45 Cong. Rec. 4644 (1910).

tioners contend that, because Congress explicitly reserved "gas" in subsequent enactments, including the Act of August 24, 1912, ch. 367, 37 Stat. 496; the Agricultural Entry Act of 1914, ch. 142, 38 Stat. 509; and the Stock-Raising Homestead Act of 1916, ch. 9, 39 Stat. 862, Congress must not have intended to reserve CBM in the 1909 and 1910 Acts. That reasoning, like petitioners' mistaken reliance on Representative Mondell's statements, overlooks the obvious answer to this supposed anomaly—Congress viewed coal (including the CBM constituent) as one mineral estate and "oil and gas" (including gas in non-coal formations) as another.

This distinction is consistent with the way the federal and state courts at the turn of the century resolved disputes respecting ownership of both seemingly fixed minerals, such as coal, and seemingly fugacious minerals, such as oil and natural gas. The courts generally treated the grant or reservation of a fixed mineral as conveying ownership of the mineral in place, so that the owner had a property interest in the underground stratum in which the mineral resides.[20] In

---

[20] See, *e.g.* 1 Ricketts, *American Mining Law* 600 & note 10 (1948) (Ricketts) ("it is familiar law that there may be two freeholds in the same body of land, that is to say, a freehold in the surface soil and enough of the earth lying beneath the surface to support it, and a freehold in the minerals underneath the surface estate, with a right of access to mine and extract the minerals"); *id.* at 602 note 25 ("Each of the separate layers or strata becomes a subject for taxation, of incumbrance, levy and sale, precisely like the surface."); Morrison & De Soto, *Mining Rights on the Public Domain* 300 (15th ed. 1917) (severance of a mineral estate "amounts practically to a partition on a horizontal plane"); 1 Lindley, *American Law Relating to Mines and Mineral Lands* 18 (3d ed. 1914) ("[T]he different strata of the subsoil might be shown to be the subject of different rights. * * * Thus, one person might be entitled to the iron, and another to the limestone. One seam or stratum of coal, if in the same lands, might belong to a third person, and another distinct seam to a fourth owner."); *id.* at 1996-1997 (same); *id.* at 2003-2004 (describing the Coal Lands Acts as an example of such "severance of title"); see also, *e.g.*,

the case of oil and gas, the courts were deeply divided on the theories of ownership.[21] They nevertheless generally agreed that the owner of the oil and gas estate could "capture" whatever material he could draw from a lawfully drilled well.[22] Where the oil and gas estates existed as separate strata, the courts recognized that the owner of a particular oil and gas stratum could not drill into and invade a mineral stratum owned by another.[23]

Cherokee & Pittsburg Coal & Mining Co. v. *Board of County Comm'rs*, 80 P. 601, 602 (Kan. 1905) (creation of a separate mineral estate results in land being "divided horizontally"); *In re Major*, 134 Ill. 19, 22 (1890) (as a result of a coal reservation, "ownership of the coal was severed from the ownership of the soil"); *Sanderson* v. *City of Scranton*, 105 Pa. 469, 474 (1884) (coal lease was in effect "a severance of the surface from the underlying strata, as created a divided ownership in these distinct portions of the land"); cf. *Pennsylvania Coal Co.* v. *Mahon*, 260 U.S. 393, 412 (1922) ("The deed conveys the surface, but in express terms reserves the right to remove all the coal under the same.").

[21] Some States embraced the non-ownership view and held that no one owned oil and gas until it was actually produced; others took the view that the surface owner had a "qualified ownership"; others took the view that oil and gas, like fixed minerals, could be "owned in place"; and others focused on ownership of the strata in which the oil or gas resided. 1 Williams & Meyers, *Oil and Gas Law* § 203 (1996) (Williams & Meyers) (discussing the four primary theories). It is difficult to decipher which States had adhered to a particular theory at any given time, but the "ownership in place" theory is now the majority view. *Id.* § 203.3. See also *id.* § 203, at 32.2 (chart showing current approaches of the various States). Contrary to petitioners' incomplete portrayal of the law (Pet. Br. 25, 39-40), the "qualified ownership" theory followed in Oklahoma, see *Champlin Refining Co.* v. *Corporation Comm'n*, 286 U.S. 210, 233 (1932), and the "nonownership theory" followed in Indiana, see *Ohio Oil Co.* v. *Indiana*, 177 U.S. 190, 209 (1900), reflect minority views.

[22] See generally Williams & Meyers § 204.4 (discussing rule of capture).

[23] A commentator from California (a "nonownership" State) described the principle as follows: "Oil and gas are often found in separate and distinct strata under the surface of the soil, and these strata are entirely

Those principles suggest how Congress likely viewed the matter in 1909, and how—until Congress specifies otherwise—this Court should view the matter now under the 1909 and 1910 Acts. CBM that resides within a coal stratum (which is the status of the CBM at issue here, Pet. App. 18a note 8) is part of the coal owner's coal estate, and any attempt by the owner of the relevant non-coal estate to drill into that stratum and extract the CBM therein is a trespass on the coal owner's property rights.[24] But CBM that has migrated from the coal stratum into conventional reservoir rock is no longer a part of the coal estate and may be captured by the owner of the non-coal estate under the rules that govern conventional natural gas.[25] Indeed, that is the approach that

---

separate and distinct and disconnected from one another; these different strata of oil-bearing rock or shale are frequently found in a horizontal position and the drilling of a well into one of these strata and the extraction of oil and gas therefrom may not, and usually does not, affect the oil and gas contained in other strata. * * * A lease dividing the lands horizontally and leasing only certain strata thereof would be binding upon the parties. Acting under such a lease *it would be a trespass for the lessee to drill into or in anywise extract oil or gas from any stratum of oil or gas-bearing rock not included within the terms of the lease.*" Ricketts 603 (emphasis added).

[24] See, *e.g.*, *Kansas Natural Gas Co.* v. *Board of County Comm'rs*, 89 p. 750, 752 (Kan. 1907) ("until gas is actually produced and severed, so that it becomes personalty the legal title to, and possession of, the entire volume remain in the owner of the strata in which it is confined").

[25] Under the rules of accommodation, the owner of the non-coal estate may drill *through* the coal stratum to reach oil and gas elsewhere, see, *e.g.*, *Chartiers Block Coal Co.* v. *Mellon*, 25 A. 597, 599 (Pa. 1893), and under the rule of capture, that owner could even drain gas from the coal stratum (assuming it is physically possible to do so) so long as the owner does so from a drilling target placed outside that stratum, cf. Williams & Meyers § 204.4. But that owner could not invade the coal stratum, fracture it, and then remove the CBM that would otherwise remain within the coal seam. Cf. *Kidwell* v. *General Petroleum Corp.*, 212 Cal. 720, 729 (1931) (a lessee

Alabama and Pennsylvania have adopted in resolving questions of CBM ownership.[26]

The approach followed by Alabama, Pennsylvania, and the en banc Tenth Circuit is not only consistent with the historical treatment of "fixed" and "fugacious" minerals, but it also answers petitioners' assertion, made later in their brief, that the law should "deal[] tenderly" with the private parties who own the non-coal portion of the coal lands. See Pet. Br. 42 & note 22. Petitioners recognize that the coalification process generates more CBM than can be retained in the coal strata, and they state that "up to 95%" of the CBM migrates to conventional reservoir rock, where it can be captured by the owner of the non-coal estate. *Id.* at 11.[27] In light of the

---

may not "drill into or in anywise extract oil or gas from any stratum of oil or gas bearing rock not included within the terms of its lease").

[26] See *NCNB Tex. Nat'l Bank* v. *West*, 631 So.2d 212 (Ala. 1993)(adsorbed CBM is part of coal estate); *Vines* v. *McKenzie Methane Corp.*, 619 So.2d 1305, 1309 (Ala. 1993) (grant of "all coal" included coalbed methane); *United States Steel Corp.* v. *Hoge*, 468 a.2d 1380 (Pa. 1983) (right to "drill through coal" for gas did not include right to recover adsorbed CBM). But see *Carbon County* v. *Union Reserve Coal Co.*, 898 P.2d 680, 681 (Mont. 1995)(grant of "all coal and coal rights" did not include CBM).

[27] We note that petitioners inconsistently assert, on the following page of their brief, that "up to 60% of the gas in the Fruitland Coal Formation at issue in this case actually migrated *into* the coal seam." Pet. Br. 12. Petitioners cite Scott et al., *Thermogenic and Secondary Biogenic Gases, San Juan Basin, Colorado and New Mexico—Implications for Coalbed Gas Producibility*, 78 AAPG Bull. 1186, 1206 (1994), but they have exaggerated the significance of that article, which was not a part of the record. The Scott article posits that one portion of the Fruitland coal formation (the "high permeability" portion) underwent "secondary biogenesis," (i.e., was metabolized by bacteria late in the coalification process), and the CBM produced therefrom, as well as "thermogenic" (i.e., temperature produced) gases, migrated to the overlaying Kirtland shale formation. See *id.* at 1186, 1204 Fig. 13 (showing migration route). The article suggests that "12-60%" of the "coalbed gases" in "the northern San

tendency of CBM to migrate out of the coal seams over the span of geologic time, the court of appeals' decision is quite generous to surface owners, such as petitioners, who are entitled to capture any such CBM that formed in the coal strata beneath their lands but migrated out of those strata. Petitioners are simply prohibited from removing whatever amount (which may be as little as 5% by petitioners' own estimates) remains within the coal seam.[28]

c. Petitioners next suggest that, if the Coal Lands Acts are construed "in pari materia" with the Mineral Leasing

---

Juan Basin" may consist of "migrated thermogenic gases." *Id.* at 1186, 1206. The article, which we have lodged with the Court, does not elaborate on whether any of that broad possible range of "migrated thermogenic gases" includes gas from non-coal sources that have migrated into the coal seam. While it is possible for external gases to migrate into naturally occuring fractures in the coalbed, substantial migration is unlikely. See Marsh Aff. JA 380-381, 395.

[28] Petitioners also make a footnote reference in this portion of their brief (Pet. Br. 36 note 18) to the Act of March 4, 1933, ch. 278, 47 Stat. 1570 (codified at 30 U.S.C. 124) and the Uraniferous Lignite Act (ULA), 30 U.S.C. 541-541e. As a general matter, those enactments are relevant primarily as examples of situations in which Congress has acted to resolve ambiguities in previous statutory grants. We agree with the en banc court that neither of those statutes is instructive on Congress's specific intent with respect to CBM in the 1909 and 1910 Acts. See Pet. App. 31a-32a n.18. In the case of the Act of March 4, 1933, Congress faced the question of whether the surface owner or a potash lessee owned sodium compounds that were intermixed with potash. Congress had not foreseen that problem, and it resolved the ambiguity by allowing agricultural entry onto lands containing the sodium compounds, but reserving the sodium therein. See 30 U.S.C. 124; H.R. Rep. No. 1938, 72d Cong., 2d Sess. (1933). In the case of the ULA, Congress addressed an ambiguity respecting a surface owner's right to remove "source material" (uranium) from lignite deposits. As the court of appeals noted (after questioning petitioners' interpretation of the legislative history), "Congress's allocation of the right to extract uranium in coal cannot be equated to the CBM at issue here because uranium," which is not a hydrocarbon, "is not invariably included in the coal as part of the coalification process." Pet. App. 32a n.18.

Act of 1920 (MLA), 30 U.S.C. 181 *et seq.*, then the coal reservation cannot include gas. Pet. Br. 37-38. That argument is unpersuasive. As we have explained, Congress enacted the Coal Lands Acts to allow settlers to homestead lands classified as valuable for coal, while at the same time reserving public ownership of "all coal" beneath the surface. Congress enacted the MLA a decade later to revise the government's methodology for leasing natural resources—including coal, oil, natural gas, and other minerals—that the United States owned. See 30 U.S.C. 181. The MLA, which applies to a broad range of publicly owned minerals, specifies leasing procedures. It can have no effect whatsoever on the scope of the mineral estate that Congress had previously reserved under the Coal Lands Acts. To be sure, the MLA provides separate provisions for leasing "coal" and leasing "gas" (Pet. Br. 37-38), but those provisions say nothing about whether Congress's reservation of "coal" under other laws includes CBM. The question of what Congress has reserved under the Coal Lands Acts is distinct from the question of how the government chooses to lease it under the MLA.

d. Petitioners also argue that Congress could not have intended to create "an unprecedented and unworkable split gas estate" in which the coal owner would be entitled to the CBM within the coal seam and the surface owner would be entitled to any gas that migrated outside that stratum. Pet. Br. 39. The court of appeals' solution, however, is neither "unprecedented" nor "unworkable." As we have already explained, there is nothing unprecedented in one party owning a coal deposit, including the CBM contained therein, and another party owning the other minerals, including any gas that migrates from the coal seam. See pages 32-36 & notes 20-26.[29] Indeed, two of the three States that have addressed

[29] Notwithstanding their concern for precedent, petitioners base their contentions in this section of their brief on either the "nonownership" or "qualified ownership" theory of oil and gas (see Pet. Br. 39-40), which reflects the approach of a minority of States. As we have explained (note 21, *supra*), most States apply the "ownership in place" theory, under which "the nature of the interest of the landowner in oil and gas contained in his land is the same as is his interest in solid minerals." See Williams & Meyers § 203.3. We do not belabor this point because there is no impediment under any of the theories of oil and gas ownership (or under *Western Nuclear*, see Pet. Br. 49 note 24) to treating CBM as part of the coal. See pages 33-36, *supra*; note 30, *infra*.

the question of CBM ownership—Alabama and Pennsylvania—have expressly adopted that supposedly "unprecedented" approach. See pages 35-36 & note 26; Pet. App. 21a-24a. Furthermore, there is no evidence that the rule adopted by the en banc court and followed for years in Alabama and Pennsylvania is "unworkable"—to the contrary, it appears to be far more practical than the result that petitioners urge.[30]

Petitioners primarily argue that the en banc court's decision is unworkable because "it can be difficult to complete a well only in the coal seam." Pet. Br. 40. But even if that were so (and we think it is not), that is a matter for the *Tribe* and its lessees. Petitioners' obligation is simply to *avoid* drilling to completion targets *within the Tribe's coal seam*, which they can surely do. Petitioners' also contend that there are economies to be gained from using a single

[30] Significantly, although Alabama follows the "nonownership" theory of oil and gas (Williams & Meyers § 203.1, at 34), and Pennsylvania follows the "ownership in place" theory (*id.* § 203.3, at 48), each State treats CBM the same way. The Solicitor of the Interior suggested in a 1990 opinion that Pennsylvania's result depended on a "stratum" theory of gas ownership (Pet. App. 171a), but that is not strictly accurate. Pennsylvania relied on the fact that the coal owner owned the coal strata and that the CBM was part of the coal. See *id.* at 23a. The Solicitor was correct that the Indian Mineral Leasing Act does not authorize an Indian Tribe to grant away its fee interest in an underlying stratum (*id.* at 171a). But nothing in that Act would necessarily prevent a Tribe from *leasing* on a royalty basis the entire coal deposit *or* only the CBM component of that deposit.

well bore and gathering facilities "to produce natural gas from multiple gas-bearing subsurface horizons (both coal and noncoal)." *Ibid.* But if that is the case, then the self- interest of the parties or their lessees should lead them to unitize their efforts. Such agreements are common.[31] Finally, it is not unusual for gas lessees to determine what proportion of their gas production comes from conventional reservoir sources and what proportion comes from unconventional CBM production from coal seams. Indeed, they must do so to qualify for the federal tax credit and to satisfy various state laws.[32]

There is, in short, nothing unworkable in recognizing that the coal owner is entitled to the CBM within the coal seam. Petitioners' theory, in fact, presents the more substantial problems. If the coal owner does not own the CBM, then this Court must assume that Congress intended the federal courts to referee, through the creation of federal common law rules, the inevitable disputes that would arise from dividing ownership of the inextricably intermingled components within the coal seam. For example, the federal courts would need to answer when a federal coal lessee who mines coal, and in the process removes CBM, must pay compensation to the surface owner for conversion of the CBM asset; when the surface owner may enjoin coal operations if the federal coal lessee wastes the CBM, and when the coal owner is entitled to injunctive relief or damages if the surface

---

[31] See, *e.g.*, Lewin, *Coalbed Methane: Recent Court Decisions Leave Ownership "Up in the Air," But New Federal and State Legislation Should Facilitate Production*, 96 W. Va. L. Rev. 631, 648 (1994) ("CBM development usually requires a negotiated compromise among gas owners and coal owners, and a 50-50 split is not an uncommon arrangement.").

[32] See, *e.g.*, 26 U.S.C. 29; C.A. Supp. App. 543-544 (citing New Mexico Oil Conservation Division Orders R-8768 & R-8769 (effective Nov. 1, 1988) (requiring that "gas production totals for * * * coal beds and * * * sandstones be kept separately")).

owner's removal of CBM damages the "degasified" coal. Those questions would become even more complex if technology develops to remove liquid "coal extracts" (page 26, *supra*) from coal. See Tissot and Welte 251-252; Hunt, *Petroleum Geochemistry and Geology* 397-408 (2d ed. 1996). We doubt that Congress intended to divide the coal estate in a way that would necessarily create vexing, fact-intensive, litigation. Rather, the simpler answer here is the better one —when Congress reserved coal, it reserved all of coal's constituents, including the CBM present within the coal seam.

B. The Court Of Appeals Properly Invoked The Canon Of Construction That Ambiguity In Public Land Grants Must Be Resolved In Favor Of The Sovereign

Since the early days of the Republic, this Court has repeatedly recognized "the established rule that land grants are construed favorably to the Government, that nothing passes except what is conveyed in clear language, and that if there are doubts they are resolved for the Government, not against it." *Western Nuclear*, 462 U.S. at 59.[33] The reason for this rule is obvious. The Property Clause grants to Congress exclusively the "Power to dispose of and make all needful Rules and Regulations respecting the Territory or other Property belonging to the United States." U.S. Const. Art. IV, § 3, Cl. 2. The rule of statutory construction that "nothing passes except what is conveyed in clear language" implements the Constitution's express division of authority by ensuring that Congress—and not the Executive or

---

[33] *E.g.*, *Andrus* v. *Charlestone Stone Prods. Co.*, 436 U.S. 604, 617 (1978); *United States* v. *Union Pac. R.R.*, 353 U.S. 112, 116 (1957); *Caldwell* v. *United States*, 250 U.S. 14, 20, (1919); *Northern Pac. Ry.* v. *Soderberg*, 188 U.S. 526, 530 (1903); *United States* v. *Arredondo*, 31 U.S. (6 Pet.) 691, 728 (1832).

Judicial Branch—makes the important policy decisions respecting how, when, and to whom the public's property shall be distributed.[34]

Petitioners do not challenge this deeply embedded rule of statutory construction. They argue instead that the court of appeals erred in applying it here. They contend, first, that the court of appeals' identification of the canon at the outset of its decision, rather than the end, "breach[ed] the most fundamental tenets of statutory construction." Pet. Br. 41; see *id.* at 41-42. That argument borders on the frivolous. The court's stylistic decision to identify that principle in the introductory paragraphs of its opinion surely does not mean that the court failed to consider the statutory text or context. To the contrary, the court's textual analysis fully comports with the Court's guidance on construing statutes. See Pet. App. 11a-33a.

Petitioners further contend that the canon has no application because "the meaning of 'coal' is clear as day," Pet. Br. 43-45, and that the court of appeals' analysis of the nature of CBM is "irrelevant and wrong," *id.* at 45-50. Those arguments are also without merit. Petitioners' assertion that the term "coal" plainly means "solid coal" does not withstand scrutiny. As we have pointed out, Congress's use of the term "coal," taken in its ordinary sense at the time the Coal Lands Acts were enacted, refers to the carbonaceous substance that nature deposited and miners mine. See pages 20-22, *supra*. Science confirms in rigorous detail what Congress knew then: coal has aggregate characteristics of a solid, but

[34] The same rationale that justifies the rule also determines the rule's limits. In the specific context of railroad grants, the Court has stated that "public grants are construed strictly against the grantees, but they are not to be so construed as to defeat the intent of the legislature, or to withhold what is given either expressly or by necessary or fair implication." *Leo Sheep Co.* v. *United States*, 440 U.S. 668, 682-683 (1979) (quoting *United States* v. *Denver & Rio Grande Ry.*, 150 U.S. 1, 14 (1893)).

it consists of a mixture of solid, liquid, and gaseous constituents, including CBM. See pages 22-25, *supra*. It would not only be completely unnatural to define the term "coal" as "solid coal," but it would raise a host of practical problems. See pages 25-28, *supra*. The historical context of the Coal Lands Acts does not support petitioners' position, which has been rejected by the majority of state courts that have had practical experience with the matter. See pages 28-41, *supra*. Contrary to petitioners' blithe assertion (Pet. Br. 43), then, the correctness of their proposed construction of the term "coal" is not "clear as day."[35]

The en banc court recognized that petitioners' "plain language" argument rests ultimately on such ipse dixit, and it properly concluded that Congress had not conveyed CBM, either expressly or by fair implication, to homesteaders who occupied the surface of lands containing coal deposits. Congress did not squarely address the issue, but a careful analysis of the statutory language, its specific context, and the broader context of the statute as a whole, *Robinson*, 519 U.S. at 341, demonstrates that the most natural reading of the 1909 and 1910 Acts is that Congress intended to reserve CBM as a constituent of the coal. At the very least, those Acts do not unambiguously *convey* the CBM constituent. The en banc court of appeals was therefore correct to apply the familiar statutory canon that public grants are construed in favor of the government and that nothing passes except what is conveyed in clear language, and to hold that the "coal

[35] As yet additional evidence of ambiguity, we point out that academic commentators have long mooted the question whether "coal" includes CBM. See, *e.g.*, text and cited articles at notes 5 and 31. Furthermore, Congress enacted legislation in 1992 that acknowledged the ongoing debate in various settings and created a framework to assist the States in resolving CBM ownership issues where they arise as a matter of state law. See Energy Policy Act of 1992, Pub. L. No. 102-486, § 1339, 106 Stat. 2986 (codified at 42 U.S.C. 13368).

reserved to the United States in the 1909 and 1910 Acts includes the adsorbed CBM." Pet. App. 32a-33a.

The en banc court's application of the canon to CBM not only makes sense in light of the text and the context of the 1909 and 1910 Acts, but it also makes sense in light of the purpose of the statutory canon. It is clear from the text and legislative history of the 1909 and 1910 Acts that Congress did not expressly consider the important policy questions respecting CBM development on public lands that would inform a decision to convey CBM while reserving the remainder of the coal deposits, and it could not have done so in light of the lack of technology for developing the CBM resource at that time. If this Court agrees with the en banc court, then Congress—the Branch of government that the Constitution charges with such decisions—will have the opportunity to deliberate on the matter in light of current technology and will be able to make a conscious decision based on the public interest. Cf. *Kiowa Tribe* v. *Manufacturing Techs., Inc.*, 118 S. Ct. 1700, 1705 (1998) ("The capacity of the Legislative Branch to address the issue by comprehensive legislation counsels some caution."); note 28, *supra*. If the Court rules for petitioners, however, then those important policy questions will be resolved through happenstance and windfall.[36]

[36] Congress may, of course, ultimately decide to allow the surface owners to develop CBM in those situations in which the government continues to own the coal reserves. It has already done so in the case of surface owners who had previously commenced CBM leasing and drilling activities. See Federal Resp. Br. in Opp. 22-24 (discussing the Enzi Act, Pub. L. No. 105-367, 112 Stat. 3313). If Congress concluded that the equities warranted such action, Congress could also provide special relief for the landowners involved in this unusual case. As we explained in our brief in opposition, the Department of the Interior has failed to identify any non-federal entity, other than the Southern Ute Indian Tribe, that has

C. The Solicitor Of The Interior Acted Properly In Withdrawing His 1981 Opinion

As we have explained, the Solicitor of the Interior issued an opinion in 1981 concluding that Congress had not reserved CBM through the Coal Lands Acts of 1909 and 1910. See pages 11-12, *supra*. The 1981 opinion was subjected to critical scrutiny for the first time in this litigation, where a unanimous court of appeals panel rejected it. The Solicitor carefully reviewed the court of appeals' analysis, first in the panel opinion and then in the en banc decision, and he concluded, in consultation with the Justice Department, that the 1981 opinion was incorrect and should not be defended in this Court. Petitioners have charged that the Solicitor actually withdrew the opinion because he was "intent on preserving at all costs a ruling in favor of the Southern Ute Tribe," and that he acted "in an attempt to short-circuit this Court's review." Pet. Reply Br. 1 (petition stage). Indeed, petitioners go so far as to state that, "[i]n an age of cynicism, it is difficult to imagine a more blatantly political and cynical act than Interior's one-line order." *Ibid.* Petitioner is mistaken.

First, as we explained in our brief in opposition, this Court has itself recognized that government agencies have an obligation to reexamine their legal interpretations on a continuing basis in light of new judicial decisions and insights gained through litigation. See Fed. Resp. Br. in Opp. 25-26; see, *e.g.*, *Estate of Cowart* v. *Nicklos Drilling Co.*, 505 U.S. 469, 476 (1992); *United States* v. *Morton*, 467 U.S. 822, 835-836 note 21 (1984) ("Litigation often brings to light latent ambiguities or unanswered questions that might not otherwise be apparent."). Thus, there was nothing inappropriate in the Solicitor's reexamining the 1981 opinion in light of the court of

succeeded to the United States' reservation of coal under the 1909 and 1910 Acts. Fed. Resp. Br. in Opp. 22.

appeals' decisions. Moreover, the Solicitor's decision to reexamine the question was a matter of public record in the court of appeals. At the rehearing en banc stage, the government informed the court of appeals and the parties that "the panel decision of the court has prompted the Solicitor of the Interior to commence a review of the analysis set out in [the 1981 opinion]" and that the "review is ongoing and could conceivably result in a modification of the views expressed therein." Pet. App. 8a-9a note 2. Indeed, government officials met repeatedly with representatives of both petitioners and the Tribe to discuss the matter.

The government's reexamination of the issue revealed that the Solicitor's 1981 opinion had failed to identify and consider the full range of considerations that had since come to light in the course of defending it in an adversarial context. In addition, like many past agency decisions that did not have the benefit of this Court's more recent statutory guidance, the 1981 opinion did not contain a rigorous evaluation of the text of the relevant statutes. As we explained in our brief in opposition, the reexamination of the 1981 opinion (which included discussions with the parties in this litigation) revealed that the 1981 opinion was deficient and ultimately unpersuasive. Fed. Resp. Br. in Opp. 25-28. Based on that analysis, the Solicitor decided that the opinion was incorrect and should be withdrawn. *Ibid.*

Contrary to petitioners' accusations, the Solicitor did not withdraw the opinion to secure a ruling in favor of the Tribe. We made clear in our brief in opposition (at note 8) that this is not an "Indian law" case and has not been regarded by the United States as such (see note 7, *supra*). The Solicitor withdrew the 1981 opinion because, as we have laid out in the discussion at pages 17-44, *supra*, the legal analysis contained therein is unpersuasive. The United States remains a defendant in the Tribe's action and will continue to assert its valid defenses, but the United States' obligation is

to see that justice is done, and it has no interest in attempting to prevail on an incorrect legal theory. See *Berger* v. *United States*, 295 U.S. 78, 88 (1935). Nor was the Solicitor's decision a "blatantly political" act. The decision was the product of a painstaking and entirely regular deliberative process within the government, with input from petitioners on numerous occasions, and it rests on the legal analysis set out in this brief. That analysis, in turn, places the policy question of CBM ownership squarely in the hands of Congress—which is where it should be.[37]

Petitioners also contend that the Solicitor's withdrawal of the 1981 opinion has unsettled their justified expectations. Pet. Reply Br. 1 (petition stage). The Solicitor gave that matter careful consideration in deciding whether to withdraw the opinion, but he was also obligated to consider certain important facts that petitioners have not highlighted. First, many of the petitioners had commenced the gas leasing or drilling activities at issue in this case *before* the Solicitor had issued his 1981 opinion. Second, the question of CBM ownership was clouded at the time the Solicitor issued his 1981 opinion, see pages 10-12 & note 5, *supra*, and the opinion itself made clear that "nothing in this opinion warrants title to any oil and gas deposit." Pet. App. 159a. Third, the decisions from the Alabama and Pennsylvania courts—as well as a competent title examination—would have put any prudent landowner on notice that title to CBM

---

[37] The Solicitor of the Interior withdrew the opinion in a "one-line order" on account of petitioners' own assertions of exigency. After the Solicitor General informed petitioners (following several government meetings with their counsel) that the government would not support their certiorari petition, petitioners opposed the government's request for a 30-day extension of time to file a brief in opposition. The government's request for an extension of time was limited to 14 days, ending on January 4, 1999. That time period did not allow sufficient time for the Solicitor of the Interior to prepare a formal opinion.

was uncertain. And fourth, petitioners (who include a sophisticated multi-national oil company) could have taken steps to reduce their risk of exposure by resolving the title disputes before commencing development. As the court of appeals panel explained, "neither Amoco, the oil industry at large, nor the Department of the Interior have previously assumed the Solicitor's opinion resolved private CBM property rights, as Amoco now advocates it should." *Id.* at 80a note 20 (citing internal Amoco memoranda).

It is well known in the oil and gas industry that "[a]nytime a conflicting claim of title is made to the minerals, subsequent development of the land becomes ultrahazardous." 1 Williams & Meyers, *Oil and Gas Law* § 225, at 386.8 (1996). Petitioners consciously elected to take the "ultrahazardous" step of drilling first and dealing with legal challenges to their title later. Petitioners' claims of reliance must be viewed in that light. Indeed, even if petitioners' reliance interests were stronger, they could not, in the end, determine the United States' position in litigation before this Court. It is inappropriate for the United States to defend a legal position before the Court—even one that it once supported—if the government has concluded that the position is wrong.

CONCLUSION

The judgment of the court of appeals should be affirmed.

Respectfully submitted.

SETH P. WAXMAN
Solicitor General
LOIS J. SCHIFFER
Assistant Attorney General
EDWIN S. KNEEDLER
Deputy Solicitor General
JEFFREY P. MINEAR
Assistant to the Solicitor General
JEFFREY C. DOBBINS
ELIZABETH ANN PETERSON
Attorneys

JOHN D. LESHY
Solicitor
Department of the Interior

APRIL 1999